OBSERVATIONS ON THE BIOLOGY OF TARACTROCERA ANISOMORPHA (LOWER) (HESPERIIDAE: HESPERIINAE)

Andrew Atkins

University of Newcastle, Waratah, N.S.W., 2308

Abstract

Descriptive notes and illustrations are given for juveniles and adults of the endemic skipper *Taractrocera anisomorpha* from central Australia.

Introduction

Taractrocera anisomorpha is distributed across the northern half of Australia as far south as the Fortesque River in Western Australia, Alice Springs in the Northern Territory, and Burleigh in southern Queensland (Common and Waterhouse, 1981). The life history is unrecorded, although females, probably of this species, were observed laying eggs on *Cenchrus ciliaris* L. (buffel grass, Poaceae) in the Gogango Ranges, central Queensland (Atkins, 1975).

In February, 1990, hesperiine larvae and larval shelters were found on tussock grasses bordering dry water courses and sand-banks associated with the Todd and Finke River systems of central Australia.

Life History

Food plant: Eulalia fulva (R. Br.) Kuntze ('silky browntop' or 'sugar grass') (Poaceae).

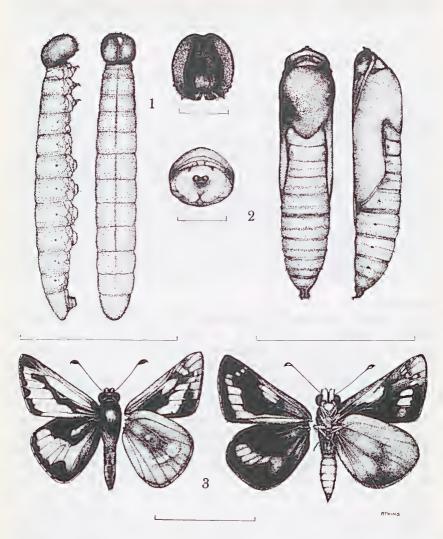
Second to final instar larvae (Fig. 1). Length 3-18 mm; head pale yellow-brown, plain or with light variable vertical bands on frons, extending to dorsal area; body yellowish cream, darker grey-brown suffused dorsal line extending almost length of body.

Pupa (Fig. 2). Length 14-16 mm; long and cylindrical, pale yellow, cream wing-cases, pale brown anterior and posterior; operculum dark brown, pointed and protruding; cremaster dorsal section rectangular, slightly crenulated, flanged and ridged at perimeter; stiff hooked setae at posterior.

Notes

Six larvae were collected in the Northern Territory, two from the Old Telegraph Station and four from Ormiston Gorge, respectively 3 km NW and 105 km W of Alice Springs. They were found in typical hesperiine tube-like shelters made from grass blades sewn together and arranged vertically or diagonally within the tussocks. The larvae were medium-sized (probably second or third instar), with two (from the Old Telegraph Station) more advanced (probably final instar). Four empty larval shelters were found at Trephina Gorge, 55 km ENE of Alice Springs.

Silky browntop is a common tussock grass that grows in stands along



Figs. 1-3. Adult and early stages of *Taractrocera anisomorpha* from Alice Springs region, Northern Territory: (1) mature larva (Scale line = 2 mm); (2) pupal head (scale line = 2 mm) and pupa (scale line = 10 mm); (3) adult male and female, left upperside, right underside (scale line = 10 mm).

creek-banks, rocky out-crops near water courses and on sandy river beds. The purplish brown leaves and drooping, branched and dark, silky seed heads are distinctive features of this plant.

The larvae were transferred to *Choris* sp. grass at Newcastle, N.S.W. and five were reared to adults. The two mature larvae pupated in late February, emerging as adults two weeks later in March. The remaining larvae continued to feed until late April, when they became immobile within their shelters. One larva died, the remaining three made no attempt to eat and pupated in January the following year. A quiescence of over nine months for hesperiine larvae reared in the comparatively humid conditions of the central coast of N.S.W. has not previously been recorded. It is not possible at present to determine what the implications of this are in the life cycle of *T. anisomorpha*.

The adults illustrated (Fig. 3.) represent the extremes of maculation in the specimens reared from the Northern Territory.

References

ATKINS, A.F. 1975. Larval foodplants of some Queensland butterflies. News Bulletin of the Entomological Society of Queensland 3: 117-119.

COMMON, I.F.B. and WATERHOUSE, D.F. 1981. *Butterflies of Australia*. Pp. xiv + 682. Angus and Robertson, Sydney.